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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,137	01/16/2004	Yury Kalnitsky	3524/199	7187

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EXAMINER

PATEL, CHIRAG R

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/760,137

Applicant(s)

KALNITSKY, YURY

Examiner

Chirag R. Patel

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 recites the limitation "the monitoring program" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-6, 8-11, 12-13, and 18-26 are rejected under 35 U.S.C. 102(e) as being anticipated by McCanne (US 2005/0010653).

Art Unit: 2141

As per claims 1 and 21, McCanne discloses a method for providing a minimum quality of service in a reduced bandwidth network that provides electronic content to a plurality of users from a remote electronic content source, ([0088])the method comprising:

Allowing the plurality of users to request content from the electronic content source; [0088]

providing a unicast transmission of content from the at least one content source; ([0108], Figure 8 item 98)

receiving the content at a client-side server at location serving a plurality of users; ([0108])

processing the received content in the client-side server such that the content may be provided to more than one of the plurality users served by the location; and ([0021], [0106])

distributing the received and processed content to each of the plurality of users which has provided a request for the content. ([0021], [0106])

As per claim 2, McCanne discloses the method of claim 1 wherein distributing the received and processed content comprises distributing the content to a multicast group including each of the plurality of users which has provided a request for content by subscribing to the multicast group. ([0021],[0183])

Art Unit: 2141

As per claim 3, McCanne discloses the method of claim 1 comprising monitoring at the client-side server for distribution of content to the plurality of users. ([0208])

As per claim 5, McCanne discloses the method of claim 3 comprising transmitting additional content from the at least one content source to the client-side server response to a request by a user of the plurality of users served at the location by the client-side server for content not currently being transmitted by the at least one content source to the client-side server. ([0210])

As per claim 6, McCanne discloses the method of claim 5 wherein transmitting the additional content comprises transmitting the additional content in another unicast transmission. ([0106])

As per claims 8 and 18, McCanne discloses the method of claim 1 wherein the processing comprises converting content received in a unicast format into a multicast format suitable for transmission to a multicast group. ([0021])

As per claim 9, McCanne discloses the method of claim 1 comprising monitoring transmitted content and limiting transmitted content to maintain an amount of bandwidth suitable for servicing at least one application being run by each of a plurality of users other than the content being received by such user. ([0208])

Art Unit: 2141

As per claim 10, McCanne discloses the method of claim 1 wherein the content is transmitted as streaming content. ([0094])

As per claim 11, McCanne discloses the method of claim 10 wherein the content is transmitted across the Internet. ([0094])

As per claim 13, McCanne discloses the system of claim 12 wherein the client-side server further comprises a listening socket for receiving and queueing content requests. ([0208])

As per claim 19, McCanne discloses the system of claim 1 wherein the monitoring program includes software that ensures a minimum amount of upstream bandwidth is preserved in a transmission path for accommodating application critical communications. ([0208])

As per claim 20, McCanne discloses a method for providing a minimum quality of service reduced bandwidth network that provides electronic content to a plurality of users from a remote electronic content source, the method comprising:

allowing the plurality of users to request content from the electronic content source; ([0088])

providing a unicast transmission of the requested content from the content source to the plurality of users in response to the content request; ([0108], Figure 8 item 98)

receiving the requested content with a client-side server at the plurality of users' location; and ([0108])

processing the received content in the client-side server such that the content provided to a multicast group; ([0106])

distributing the received content from the multicast group to the plurality of users. ([0106])

As per claim 21, McCanne discloses the method of claim 20 further comprising monitoring the transmission characteristics of the network with fault detection software to determine if a quality of service over any transmission link is below a predetermined level. ([0155])

As per claim 22, McCanne discloses the method of claim 20 wherein the monitoring further comprises analyzing the network interconnections and rerouting some or all of the content if any communication path is providing a quality of service below the predetermined level. ([0208])

As per claim 23, McCanne discloses the method of claim 20 wherein the monitoring further comprises analyzing the client-side server for potential

Art Unit: 2141

quality of service problems. ([0208])

As per claim 24, McCanne discloses the method the method of claim 23 wherein the monitoring further comprises assessing the availability of other client-side servers. ([0208])

As per claim 25, McCanne discloses the method of claim 24 further comprising replacing an inoperative client-side server with a server deemed available in the assessment step to maintain a minimum quality of service level. ([0197])

As per claim 26, McCanne discloses the method of claim 24 further comprising reassigning at least part of a workload of a client-side server deemed overburdened by the fault detection software with a server deemed available in the assessment step to balance client-side server workload. ([0208])

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 14-16 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCanne in view of McHale et al (US 6,160,843).



As per claims 4 and 15, McCanne et al. discloses the method of claim 3. McCanne et al. fails to disclose terminating the content transmission when client-side server is not distributing content to the plurality of users. McHale et al. discloses the method of claim 3 comprising terminating the content transmission from the at least one content source to a client-side server when the client-side server is not distributing the content to any of the plurality of users. (Col 18 lines 26-36) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to terminating the content transmission when client-side server is not distributing content to the plurality of users in the disclosure of McCanne. The motivation would have been to guarantee a level of service to a subscriber system. (Col 15 lines 28-45)

As per claim 14, McCanne discloses the system of claim 12 wherein the client side server comprises a monitoring program. ([0208]) McCanne fails to disclose monitoring program monitoring subscribers to the multicast group. McHale et al. discloses a monitoring program to monitor subscribers to the multicast group to determine if at least some multicast group subscribers are requesting the content transmitted by the content source. (Col 17 lines 18-34) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to monitor subscribers to the multicast to the multicast group in the disclosure of McCanne. The motivation would have been to prevent oversubscribed resources are being unnecessarily tied-up (Col 17 lines 18-34)

As per claim 16, McCanne/Mchale et al. disclose the system of claim 14, and McCanne discloses wherein the monitoring program includes software that requests transmission of an additional content stream if a subscriber within the multicast group is requesting content not currently being transmitted by the content source. ([0210])

Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCanne in view of Khan et al. (US 2002/0143951).

As per claims 7 and 17, McCanne discloses the method of claim 1. McCanne fails to disclose converting multicast format content into unicast format content. Khan et al. discloses the method of claim 1 wherein the providing comprises converting multicast format content into unicast format content for transmission to the client-side server. ([0022]) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to convert a multicast format into a unicast format in the disclosure of McCanne. The motivation would have been to allow a unicast client to receive a multicast transmission. ([0022]).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are disclosed in the Notices of References


Art Unit: 2141

cited page and teach numerous ways of implementing a network architecture for data transmission. A close review of these references is recommended.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag R. Patel whose telephone number is (571)272-7966. The examiner can normally be reached on Monday to Friday from 7:30AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER